

REMARKS

Status of Claims

Claims 1-20 are pending. Claims 1-20 have been rejected under 35 U.S.C. §103. Claims 1, 2, 4, 8-10, 12, 18, and 19 have been amended. Claims 1-20 remain for consideration upon entry of the present Amendment. No new matter has been added.

Claim Objections

The Examiner has objected to claims 1-20 because it is allegedly unclear whether the amount of each component in the adhesive tape is defined as a percentage by weight or a percentage by volume. Claims 1, 2, 4, 8, 12, 18, and 19 have been amended to include the term "by weight" after the percentage signs in accordance with the Examiner's request.

Claim Rejections – 35 U.S.C. §103(a)

Claims 1-8, 11-14, and 18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,612,136 to Everaerts et al. (hereinafter "Everaerts") in view of U.S. Patent No. 5,503,927 to Ragland et al. (hereinafter "Ragland") as evidenced by U.S. Patent No. 3,707,521 to De Santis (hereinafter "De Santis").

The Examiner alleges that Everaerts discloses an adhesive tape comprising a core layer and a pressure-sensitive adhesive layer coated on at least one side of the core layer and that the core layer of the adhesive tape of Everaerts corresponds to the backing layer of the claimed invention. The Examiner further alleges that Everaerts discloses the core layer as comprising an acrylic copolymer that may incorporate similar or dissimilar acrylic monomers having similar or different additives from those acrylic copolymers contained in the adhesive layer and that the core layer comprises about 80 parts or more of an alkyl acrylate monomer and up to about 20 parts of a copolymerizable modifier monomer based upon 100 parts by weight of acrylic monomer. The Examiner alleges that Everaerts discloses the presence of a primer layer

between the acrylic foam core and the pressure-sensitive adhesive. The Examiner notes that Everaerts does not specifically disclose a composition of the primer layer.

The Examiner also alleges that Ragland teaches a pressure-sensitive adhesive laminate comprising a silicone foam, an acrylic pressure-sensitive adhesive layer, and a urethane primer layer disposed between the silicone foam and the acrylic pressure-sensitive adhesive layer to provide the laminate having long term bond strength, and that this is important to the expectation of successfully practicing the invention of Everaerts, thus suggesting the modification.

De Santis is relied on by the Examiner as allegedly providing evidence that teaches the urethane primer being a silane-modified elastomer solution. The Examiner further alleges that it is known in the adhesive art that the urethane primer is a silane-modified elastomer solution in view of the teachings of De Santis and that therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silane-modified elastomer solution as the primer layer of Everaerts motivated by the desire to provide the adhesive tape with long term bond strength.

The Examiner also alleges that Everaerts does not specifically disclose the amount of each individual monomer in the foam layer, but that such features would have been recognized by one skilled in the art as dependent upon the intended use of the product and that in the absence of unexpected results it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the cited monomers having the amount ranges claimed motivated by the desire to provide an adhesive tape having excellent ability to adhere to acid-rain resistant automotive paints.

The Examiner still further alleges that Everaerts discloses the core layer comprising 5 to 65 volume percent of hollow glass microspheres, that such a feature would have been recognized by one skilled in the art to promote the foam-like appearance of the core layer, and that in the absence of unexpected results it would have been obvious to one having ordinary skill in the art at the time the invention was

made to employ the microsphere having the amount range claimed motivated by the desire to promote the foam-like appearance of the core layer.

Everaerts is directed to a pressure sensitive adhesive having improved adhesion to acid-rain resistant automotive paints. The adhesive comprises a cross-linked copolymer comprising at least one monomer selected from the group consisting of monofunctional unsaturated meth(acrylate) esters, a nitrogen-containing basic monomer that is copolymerizable with the ester(s), an optional copolymerizable acidic monomer, and a cross-linking agent.

Ragland is directed to polymer-pressure sensitive adhesive combinations, particularly in the form of laminates, and methods of producing such combinations. In the combinations, the bond strength of the pressure sensitive adhesive to the polymer layer is improved by priming the polymer surface with a urethane primer before the application of the adhesive to the polymer surface. The polymer surface may be activated using a silicon-containing treating agent (if necessary) to accept the urethane primer. In one aspect, the laminate comprises a polymeric layer, a coating of urethane on the surface of the polymeric layer, and a pressure sensitive adhesive applied to the coated surface. The polymeric layer may be elastomeric (e.g., silicone foam, EPDM, PVC, perfluoroethylene, vinylidene fluoride, or the like).

De Santis is directed to a polyurethane sealant-primer system having an isocyanate- reactive surface primer composition and a moisture-curable polyurethane sealant composition. The isocyanate-reactive surface primer composition comprises an aliphatic silane; carbon black; one of chlorinated rubber, PVC, polyacrylate resins, and polyester resins; a condensation product of toluene diisocyanate and hexamethylene diisocyanate; a catalyst; and an organic solvent.

Claim 1 recites an acrylic pressure-sensitive adhesive tape comprising a primer layer disposed between a layer of acrylic backing and a layer of pressure sensitive adhesive, the primer layer comprising a primer selected from the group of primers consisting of polyamide solution, polyamide emulsion, nitrile rubber based solution, nitrile rubber based emulsion, natural rubber based solution, natural rubber based

emulsion, ethylene-propylene copolymer rubber based solution, ethylene-propylene copolymer rubber based emulsion, ethylene-propylene-diene monomer terpolymer rubber based solution, ethylene-propylene-diene monomer terpolymer rubber based emulsion, poly(ethylene-co-vinyl acetate) solution, poly(ethylene-co-vinyl) acetate emulsion, poly(ethylene-co-vinyl acetate and alcohol) solution, poly(ethylene-co-vinyl acetate and alcohol) emulsion, silane modified rubber solutions, and silane modified elastomer solutions.

Everaerts, Ragland, and De Santis each fail to disclose, teach, or suggest a primer layer disposed between a layer of acrylic backing and a layer of pressure sensitive adhesive in which the primer layer comprises a primer as described above in claim 1. Because Everaerts, Ragland, and De Santis each individually fail to disclose, teach, or suggest the primer layer of claim 1 in which the primer layer comprises a primer as described in claim 1, any combination of Everaerts, Ragland, and De Santis would likewise fail to disclose, teach, or suggest the primer layer of claim 1.

Furthermore, in response to the Examiner's assertion that the teachings of Ragland (particularly the inclusion of a urethane primer layer between the silicone foam and the acrylic pressure sensitive adhesive layer) are important to the expectation of successfully practicing the invention of Everaerts thus suggesting the modification to arrive at the invention as presently claimed, Applicants point out Everaerts' failure to disclose a composition of the primer layer of that invention. The use of a primer layer in Everaerts also appears to be optional, thus rendering the Everaerts invention operable without a primer. Because Everaerts does not disclose a composition for his primer layer and further indicates that the use of a primer layer is optional, the teachings of Ragland (as they relate to the primer layer) are clearly not important to the expectation of successfully practicing the Everaerts invention. Accordingly, the combination of Everaerts with Ragland cannot be said to suggest the invention as recited in claim 1.

With regard to the De Santis reference, Applicants note that that reference also discloses urethanes for use as a primer. In contrast to the Examiner's assertion that De Santis is relied on as evidence that "teaches the urethane primer being a silane modified

elastomer solution," Applicants point out that urethanes and silanes are different compounds. In particular, silane are silicon hydrides (SiH_4) whereas urethanes are ethyl carbamates ($\text{CO}(\text{NH}_2)\text{OC}_2\text{H}_5$). Because De Santis teaches urethanes and Applicants clearly claim silane-modified rubber- and elastomer solutions, and because urethanes and silanes are two very different compounds, there can be no suggestion or motivation to combine De Santis with Everaerts to arrive at the invention as recited in Applicants' claim 1.

To establish a prima facie case of obviousness for a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Because Everaerts, Ragland, and De Santis each fail to disclose, teach, or suggest what Applicants claim in their claim 1, viz., a primer layer disposed between a layer of acrylic backing and a layer of pressure sensitive adhesive in which the primer layer comprises any one or a combination of the primers as described above, Everaerts, Ragland, and De Santis each fail to teach all of the claim limitations of Applicants' invention. Consequently, because not all of the claim limitations are taught by the cited references, Applicants' claim 1 is necessarily non-obvious. Accordingly, Applicants respectfully request that the rejection of claim 1 be withdrawn.

Further, obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Because Ragland and De Santis both disclose urethanes (in contrast to silane-modified rubber- and elastomer solutions, as claimed by Applicants), and because urethanes and silanes are two very different compounds, Ragland and De Santis provide no suggestion or motivation for combination with Everaerts to arrive at Applicants' invention as recited in claim 1. Consequently, because there is no suggestion or motivation to combine Ragland or De Santis with Everaerts to arrive at Applicants' invention as recited in claim 1, Applicants' claim 1 is necessarily non-obvious. Accordingly, Applicants again respectfully request that the rejection of claim 1 be withdrawn.

Claims 9, 10, 15, and 16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts in view of Ragland as evidenced by De Santis as applied to claim 1 further in view of U.S. Patent No. 5,308,887 to Ko et al. (hereinafter "Ko"). Claims 17 and 20 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts in view of Ragland as evidenced by De Santis as applied to claim 1 further in view of U.S. Patent No. 5,264,278 to Mazurek et al. (hereinafter "Mazurek"). Claim 19 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Everaerts in view of Ragland as evidenced by De Santis as applied to claim 1 further in view of Ko and Mazurek.

Claims that depend from a claim that is non-obvious are themselves necessarily non-obvious. Because claims 2-20 depend from claim 1, and because claim 1 is asserted to be non-obvious for the reasons presented above, claims 2-20, because they depend from claim 1, are necessarily non-obvious. Applicants, therefore, respectfully submit that claims 2-20 are allowable. Accordingly, Applicants respectfully request that the rejections of claims 2-20 be withdrawn.

CONCLUSION

Applicants believe that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein are allowable to Applicants. In view of the foregoing points that distinguish Applicants' invention from those of the prior art and render Applicants' invention non-obvious, Applicants respectfully request that the Examiner reconsider the present application, remove the rejections, and allow the application to issue.

If the Examiner believes that a telephone conference with Applicants' attorneys would be advantageous to the disposition of this case, the Examiner is invited to telephone the undersigned.

It is believed that no additional fees or deficiencies in fees are owed apart from the Three-Month Extension of Time, for which authorization is given to charge our Deposit Account No.13-0235. However, authorization is hereby also given to charge our Deposit Account No.13-0235 in the event any additional fees are owed.

Respectfully submitted,

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